

STATE OF SOUTH DAKOTA SERVICES CONTRACT August 2010
DEPARTMENT OF AGRICULTURE
CWN SINGLE ENGINE AIRTANKER

New Frontier Aviation, Inc.
PO Box 754
Fort Benton, MT 59442

(406) 622-5682
(CONTRACTOR)

Department of Agriculture
523 East Capitol
Pierre, SD 57501

(605) 773-3623
(STATE)

The **STATE** hereby enters into this contract for services with **CONTRACTOR** in consideration of and pursuant to the terms and conditions set forth herein.

1. The **CONTRACTOR'S** service under this contract shall commence on **August 1, 2010** and end on **September 30, 2010**, unless terminated pursuant to the terms hereof.

Services to be performed:

The **CONTRACTOR** agrees to provide air tanker suppression equipment and personnel to the **STATE** as stipulated:

The **CONTRACTOR** will perform those services described herein.

2. **CONTRACTOR** agrees to indemnify and hold the State of South Dakota, its officers, agents and employees, harmless from and against any and all actions, suits, damages, liability or other proceedings that may arise as the result of performing services hereunder. This section does not require the **CONTRACTOR** to be responsible for or defend against claims or damages arising solely from errors or omissions of the **STATE**, its officers, agents or employees.
3. The **CONTRACTOR** may not use subcontractors to perform the services described herein without the express prior written consent of the **STATE**. The **CONTRACTOR** will include provisions in its subcontracts requiring its subcontractors to comply with all applicable provisions of this contract, to indemnify the **STATE**, and to provide insurance coverage for the benefit of the **STATE** in a manner consistent with this contract. The **CONTRACTOR** will cause its subcontractors, agents, and employees to comply with applicable federal, state and local laws, regulations, ordinances, guidelines, permits and requirements and will adopt such review and inspection procedures as are necessary to assure such compliance.
4. While performing services hereunder, **CONTRACTOR** is an independent contractor and not an officer, agent, or employee of the State of South Dakota.
5. **CONTRACTOR** will use **STATE** supplies and/or facilities only to the extent provided in the Technical Specifications and Operational Specifications sections of this Agreement

6. This contract is nonexclusive in character, and the **STATE** shall retain the right to contract for the same or similar services with other persons or entities as it may see fit in its sole and uncontrolled discretion.

7. **Termination:**

- a. This contract may be terminated by either party hereto upon thirty (30) days written notice. In the event the **CONTRACTOR** breaches any of the terms or conditions hereof, this contract may be terminated by the **STATE** at any time without notice. If termination for such a default is effected by the **STATE**, any payments due to **CONTRACTOR** at the time of termination may be adjusted to cover any additional costs to the **STATE** because of **CONTRACTOR'S** default. Upon termination the **STATE** may take over the work and may award another party a contract to complete the work under this contract. If after the **STATE** terminates for default by the **CONTRACTOR** and it is determined that **CONTRACTOR** was not at fault, then the **CONTRACTOR** shall be paid for eligible services rendered and expenses incurred up to the date of termination.
 - b. The Wildland Fire Suppression Division Director and/or State Fire Aviation Officer is authorized in his discretion to suspend performance of this contract pending investigation or correction of a safety concern.
 - c. Upon involvement in an Aircraft Accident or NTSB Reportable Incident (see 49 CFR Part 830), a pilot operating under this contract will be suspended from performing pilot duties under this contract pending the investigation outcome. Upon completion of the investigation, reinstatement of the pilot to his duties under this contract will be at the sole discretion of the South Dakota State Fire Aviation Officer.
 - d. This contract depends upon the continued availability of appropriated funds and expenditure authority from the Legislature for this purpose. If for any reason the Legislature fails to appropriate funds or grant expenditure authority, or funds become unavailable by operation of law or federal funds reductions, this contract will be terminated by the **STATE**. Termination for these reasons is not a default by the **STATE** nor does it give rise to a claim against the **STATE**.
8. Performance of contract services may involve work and/or residence on **STATE** property. **CONTRACTOR** employees are expected to follow the rules of conduct established by the manager of such facilities that apply to all (both Government and non-Government) personnel working or residing on such facilities. A copy of such rules will be available from the manager of such facilities.
 9. This contract may not be amended except in writing, which writing shall be expressly identified as a part hereof, and be signed by an authorized representative of each of the parties hereto.
 10. **CONTRACTOR** will comply with all federal, state and local laws, regulations, ordinances, guidelines, permits and requirements applicable to providing services pursuant to this contract, and will be solely responsible for obtaining current information on such requirements.

11. This contract shall be governed by and construed in accordance with the laws of the State of South Dakota. Any lawsuit pertaining to or affecting the contract shall be venued in Circuit Court, Sixth Judicial Circuit, Hughes County, South Dakota.
12. This contract depends upon the continued availability of appropriated funds and expenditure authority from the Legislature for this purpose. If for any reason the Legislature fails to appropriate funds or grant expenditure authority, or funds become unavailable by operation of law or federal funds reductions, this contract will be terminated by the **STATE**. Termination for these reasons is not a default by the **STATE** nor does it give rise to a claim against the **STATE**.
13. In the event that any provision of this contract shall be held unenforceable or invalid by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof.
14. All other prior contracts for SEAT services and discussions, communications and representations concerning the subject matter of this contract are superseded by the terms of this contract, and except as specifically provided herein, this contract constitutes the entire contract with respect to the subject matter hereof.
15. Any notice or other communication required under this contract shall be in writing and sent to the address set forth above. Notices shall be given by and to the **Wildland Fire Coordinator on behalf of the STATE**, and by Andy Taylor, on behalf of the **CONTRACTOR**, or such authorized designees as either party may from time to time designate in writing. Notices or communications to or between the parties shall be deemed to have been delivered when mailed by first class mail, provided that notice of default or termination shall be sent by registered or certified mail, or if personally delivered, when received by such party.
16. The **STATE** will make payment for services upon satisfactory completion of the services. Payment will be made pursuant to itemized invoices submitted with a signed state voucher. The **CONTRACTOR** will submit one invoice to the **STATE** for all expenses. Payment will be made consistent with SDCL ch. 5-26.
17. A copy of the contract and all modifications are to be maintained in each airplane during its use under this contract.

DOCUMENTATION

18. A Daily Activity Log shall be completed and signed daily by both the **CONTRACTOR** or representative and the **STATE** or representative. The completed and signed Daily Activity Log must be attached to the **CONTRACTOR'S** invoice or may be used as the invoice by the **CONTRACTOR**.
19. **CONTRACTOR** must submit all invoices, with necessary documentation and receipts attached, to the South Dakota Wildland Fire Suppression Division, Fire Business Accountant at the address below. All invoices must be submitted within 30 days of initial dispatch, and every 15 days thereafter that the Contractor is providing services for the State of South Dakota under this contract, or payment will be reduced by 1.5% per month.

South Dakota Wildland Fire Suppression
Fire Business Accountant
4250 Fire Station Road, Suite #2
Rapid City, SD 57703

20. Payment shall be made by the **STATE** in the following manner: The **STATE** will have 15 working days to review all invoices submitted to assure they are proper and correct. The **STATE** will notify the **CONTRACTOR** of any discrepancies in the submitted invoices. The **CONTRACTOR** will then submit a corrected invoice or make the necessary corrections on the original invoice submitted.

INSURANCE

21. The **CONTRACTOR**, at the Contractor's expense, agrees to maintain, during the continuance of this contract, aircraft public and passenger liability insurance with limits of liability for:

- **Aviation Liability Insurance**

The **CONTRACTOR** shall maintain business aviation liability insurance or equivalent form with a limit of not less than \$500,000 for each occurrence and \$100,000 each passenger. Such insurance shall include coverage for owned, hired and non-owned aircraft. Contractor shall ensure the coverage applies to activities performed in accordance with this contract. The certificate of insurance must state: "Employees of the Certificate Holder are included as Additional Insureds as respects to operations by/on behalf of the Named Insured." "Insurer is aware and agrees that aerial fire suppression activities covered as part of this policy and passenger liability is extended to the same use of the aircraft and waiver of subrogation is included in the Contractor's Insurance as it relates to this contract."

- **Business Automobile Liability Insurance**

The **CONTRACTOR** shall maintain business automobile liability insurance or equivalent form with a limit of not less than \$500,000 for each accident. Such insurance shall include coverage for owned, hired and non-owned vehicles.

- **Workers' Compensation Insurance**

The **CONTRACTOR** shall procure and maintain Workers' Compensation and employer's liability insurance as required by South Dakota law.

- **Certificates of Insurance**

Before beginning work under this contract, the **CONTRACTOR** shall furnish the **STATE** with properly executed Certificates of Insurance which shall clearly evidence all insurance required in this contract and which provide that such insurance shall not be canceled, except on 30 days' prior written notice to the **STATE**. **CONTRACTOR** shall furnish copies of insurance policies to the **STATE**.

TECHNICAL SPECIFICATIONS

22. After award of the contract and any renewal thereof, an inspection of the **CONTRACTOR'S** proposed aircraft, equipment and personnel shall be made by the United States Department of Interior, Office of Aircraft Services at the expense of the **CONTRACTOR**. The **STATE** shall act as a liaison between the **CONTRACTOR** and the Office of Aircraft Services to request and coordinate the inspection.
23. The **CONTRACTOR** agrees to utilize, during the continuance of this contract, an airplane meeting the following requirements:
- Airplane must be certified in the Restricted Category under 14 CFR Part 21.25 and 21.185 to include the special purpose of forest and wildlife conservation (fire suppression) work or be certificated in a Standard Airworthiness category under 14 CFR Part 21.187 (Multiple Airworthiness Certification)
 - Current annual FAA inspection
 - FAA approved hopper capacity of at least 400 US gallons of material weighing 8.3 pounds per gallon (3,320 pounds)
 - Low wing configuration
 - Endurance with full hopper of at least 2 hours at 75% max rated power
 - Have documentation the aircraft can either:
 - Maintain a steady (positive) gradient of climb of at least 4 percent, when equipped for contract with the offered hopper load and fuel for 1 ½ hours, at 27 degrees C (81F) at 5,000 feet pressure altitude or;
 - Climb at least 500 feet per minute when equipped for contract with the offered hopper load and fuel for 1 ½ hours, at 27 degrees (81F) at 5,000 feet pressure altitude.
 - The aircraft shall be equipped with the instruments required by certification and in accordance with 14 CFR Parts 91.205 (DAY VFR). The following additional instruments shall be installed, operable, and airworthy:
 - Gyroscopic rate-of-turn, slip/skid indicator (turn and bank).
 - Directional Gyro (DG), or a Vertical Card Compass designed and manufactured in accordance with a Technical Standard Order (TSO) authorization.
 - Free air temperature indicator.
 - Rate-of-climb indicator.
 - Landing lights.
 - White wing-tip strobe lights.
 - High visibility, pulsating, forward facing, conspicuity lighting.

For loading, the aircraft shall be equipped with a 3-inch male Kamlock coupler (Mil C 27487 or equal).

One 1½-inch female National Hose Thread and one 2 ½ inch female National Hose Thread adapters to 2 inch and 3 inch male and female Kamlock couplers shall be carried on board the aircraft.

- The PIC shall ensure that the following equipment is current, operable, and accessible at the pilot station:

Approved pilot's operating handbook (POH), including performance charts, as appropriate.

Cockpit checklist containing the following procedures:

Before starting engines	Emergencies
Before drop	Fuel
After drop	Hydraulic
Before takeoff	Electrical
Before landing	Mechanical
Cruise	
After landing	
Stopping engine	

Current aviation charts covering area of operation.

- Aircraft tank and apparatus for fire suppressant materials.
- Tank shall have a controllable gate/door system that allows the volume of the tank to be released in selected drop configurations including full salvo, reduced flow/extended trail, or partial tank (split) drops. Minimum fluid opening shall be 360 square inches, with tank venting appropriate to the tank capacity. Functional configuration may be a single door, multiple-door, split door, or rotary gate. Control may be mechanical, hydraulic or pneumatic, or a combination.
- All systems must have an emergency dump feature that enables the load to be dropped in less than six seconds. Emergency systems operated by pneumatic or hydraulic pressure are to be isolated from the normal tank system so that normal system function, or failure of the normal system pressure does not affect the emergency system pressure. Emergency systems dependent on normal operating systems for initial charge shall have a pressure gauge or indicator readily visible to the crew. Emergency systems dependent on pre-charged bottles must have a positive means of checking system charge during preflight.
- The primary emergency dump control must be positioned within easy reach of the pilot while strapped in their seat. Electrically operated controls must be wired directly from a source of power isolated from the normal aircraft electrical bus and protected by a fuse or circuit breaker.
- The tanks and all operating mechanisms shall be Original Aircraft Equipment Manufacturer's (OEM), as listed on the type certificate or other approved data, or installed in accordance with a FAA STC or FAA field approval. All dispensing equipment shall be maintained in accordance 14 CFR Part 43.
- The inspection program used by the **CONTRACTOR** shall provide for a detailed inspection of the tanks and dumping system, to include emergency dumping systems,

and associated tubing and electrical system. This inspection shall be performed prior to the initial inspection and at least annually thereafter. Such inspections must include provisions for filling the tanks to their capacity with water for a leak test. Tanks shall be maintained in a substantially leak-free condition throughout the period of performance.

- Aircraft marking. The SEAT shall have a high visibility paint scheme, yellow or other suitable color, with contrasting markings. Contrasting color stripes may be added to the outer wing surfaces to meet this requirement. The stripes shall be at least 12 inches wide and 12 inches apart if more than one stripe is required. The stripes are not required to be applied to primary flight control surfaces.
- An assigned tanker number shall be displayed on both sides of the vertical stabilizer and/or rudder. The numbers shall be as large as possible, but at least 12 inches high with the format and spacing the same as aircraft "N" numbers (ref 14 CFR Part 45.29).
- Maintenance Requirements

As a minimum, SEATs shall receive annual and 100-hour inspections. In lieu of this requirement, the aircraft may be maintained via a FAA-approved/accepted inspection program. Compliance with all applicable mandatory manufacturers' bulletins and FAA Airworthiness Directives (AD) is required.

Prior to the initial inspection, all maintenance deficiencies shall be corrected or deferred in accordance with 14 CFR Part 91.213. Equipment required by this procurement may not be deferred. Deferred discrepancies shall be evaluated and the aircraft approved for use on a case-by-case basis. Those deficiencies occurring during performance shall be corrected in accordance with appropriate Federal Aviation Regulations, or operator's approved maintenance manual.

All components, including reciprocating engines, shall be overhauled upon reaching the factory recommended time or FAA-approved extension. Turbine engine hot section inspections (HSIs) and data plate checks shall be accomplished upon reaching the factory recommended time or FAA-approved extension. All time-life parts, due by either hour, cycle, or calendar day, shall be replaced upon reaching the factory-recommended time or FAA-approved extension.

The aircraft's required weight and balance data shall be determined by actual weighing of the aircraft within 24 calendar months preceding initial carding, equipped as a SEAT and following any major repair or major alteration or change to the equipment list which significantly affects the center of gravity of the aircraft.

All weighing of aircraft shall be performed on scales that have been certified as accurate within the 24 calendar months preceding the date of weighing. The certifying agency may be any accredited weights and measures laboratory.

A list of equipment installed in the aircraft at the time of weighing must be compiled. The equipment list will include the name of each item installed. Items which may be easily removed or installed for aircraft configuration changes (seats, doors, radios, special mission equipment, etc.) shall also be listed including the name, the weight and arm of each item. Each page of the

equipment list must identify the specific aircraft by at least serial number or registration number of the aircraft. Each page of the equipment list will be dated indicating the last date of weighing or computation. The weight and balance must be revised each time new equipment is installed or old equipment is removed. Weight and balance procedures under 14 CFR Parts 135.23(b) and 135.185 are acceptable.

▪ **Communication Systems Requirements:**

The following systems shall be furnished, installed, and maintained by the **CONTRACTOR** in accordance with the manufacturer's specifications.

One automatic-portable/automatic-fixed or automatic-fixed Emergency Locator Transmitter (ELT), utilizing an external antenna and meeting the same requirements as those detailed for civil airplanes in 14 CFR Part 91.207 (excluding section f), shall be installed per the manufacturer's installation manual, in a conspicuously marked location. **NOTE: An ELT meeting either TSO-C91a or TSO-C126 is required effective January 1, 2005.**

One panel-mounted VHF-AM (COMM-1) aeronautical transceiver, operating in the frequency band of 118.000 to 135.975 MHz, with a minimum of 720 channels in no greater than 25 kHz increments, and a minimum of 5 watts carrier output power.

NOTE: A 760-channel VHF-AM transceiver covering 118.000 to 136.975 MHz is required effective January 1, 2005.

One VHF-FM "multi-mode" aeronautical transceiver (FM-1), which provides selection of either narrowband (12.5 kHz) or wideband (25.0 kHz) channel spacing operation on each channel. The transceiver shall meet the following specifications and criteria:

The transceiver's operational frequency range shall include the band of 150 to 174 MHz. The operator shall be able to program any usable channels within that band while in flight.

One panel-mounted digital aeronautical transceiver, operating in the frequency band that is compatible with the State of South Dakota's digital radio system.

Carrier output power shall be 5 to 10 watts nominal value. The transceiver shall be capable of displaying receiver and transmitter operating frequency, and shall provide both receiver and transmitter activation indicators for MAIN and GUARD. Simultaneous monitoring of both MAIN (150-174 MHz) and GUARD (168.625 MHz) receivers is required. Scanning of the GUARD frequency is not acceptable. Single-band guard receivers which operate in the wideband (25.0 kHz) mode are acceptable.

One CTCSS sub-audible tone encoder (which may be an integral part of the transceiver), with a minimum of 32 selectable tones meeting TIA/EIA-603 standards, shall be interfaced to the above transceiver. It is desired that the encoder provide a display of the selected tone.

The encoder/transceiver system shall be capable of encoding a 110.9 Hz tone on all GUARD (168.625 MHz) transmissions.

The following models of VHF-FM aeronautical transceivers are known to meet the above requirements:

- BK Radio KFM-985-newer "multi-mode" models only
- Eureka Radio ERS-96000NB w/external tone encoder
- NAT(Northern Airborne Technology) NPX-138N-050
- NAT(Northern Airborne Technology) NTX-138-050
- Technisonics TFM-138 (serial number 1540 and up)
- Technisonics TFM-138B (all)
- Technisonics TFM-138C (all)
- Technisonics TFM-500 (all)
- Wulfsberg RT-5000/C-5000 with Guard option
- Wulfsberg RT-9600N w/C-962A control head

- Navigational System Requirements:

One Global Positioning System (GPS) receiver, powered by the aircraft, with externally mounted antenna; The GPS may be a handheld type, but must be secured (mounted to the aircraft or knee board) and not held in the hand.

- Audio System Requirements:

One audio control system, which provides controls for election and operation of all installed transceivers via a single set of jacks through which the helmet-mounted microphone and earphones are connected.

- Other Avionics

One ATC transponder and altitude reporting system meeting the requirements of 14 CFR Part 91.215 (a) and (b) and tested and inspected per 14 CFR Part 91.413.

One Automated Flight Following transponder that is compatible with the Governments AFF network. The AFF system shall be powered by the aircraft electrical system, and operational in all phases of flight.

- Automated Flight Following System

- One automated Flight Following (AFF) system compatible with the federal government's AFF tracking network (Webtracker) is required. Not all available AFF systems are compatible with Webtracker nor meet Webtracker's requirements. The **CONTRACTOR** must ensure that the AFF system offered is compatible with Webtracker. To view Webtracker's current compatibility requirements refer to <https://www.aff.gov>.
- The AFF System must be powered by the aircraft's electrical system, installed per the manufacturer's installation manual, and operational in all phases of flight.

AFF equipment must utilize as a minimum: Satellite communications, provide data to the federal government's Webtracker software, use aircraft power via a dedicated circuit breaker for power protection, and be mounted so as to not endanger any occupant from AFF equipment during periods of turbulence. Any AFF manufacturer-required pilot display(s) or control(s) must be visible/selectable by the pilot(s). Remote equipment having visual indicators should be mounted in such a manner as to allow visual indicators to be easily visible.

- AFF communications must be fully operational in the lower 48 States. **CONTRACTOR'S** accepting dispatches to the State of Alaska, Southern Canada, or Western Canada must have an AFF system capable of being tracked in these locations at all times. Not all manufacturers' AFF equipment communication links will operate effectively in all geographic areas.
 - The **CONTRACTOR** must maintain a subscription service through the AFF equipment provider allowing AFF position reporting for satellite tracking via Webtracker. The position-reporting interval must be every 2 minutes while the aircraft is in flight. The **CONTRACTOR** must register AFF equipment with the Boise Help Desk providing: Complete tail number, manufacturer and serial number of the AFF transceiver; aircraft make and model; and Contractor contact information. If the **CONTRACTOR** relocates previously registered AFF equipment into another aircraft, then the **CONTRACTOR** must contact the Fire Applications Help Desk (FAHD) making the appropriate changes prior to aircraft use. In all cases, the contractor must ensure that the correct aircraft information is indicated within Webtracker. The **CONTRACTOR** must contact the FAHD of system changes, scheduled maintenance, and planned service outages.
- Avionics Installation and Maintenance Standards
 - All avionics systems used in or on the aircraft and their installation and maintenance shall comply with all applicable requirements of the CFR.
 - Strict adherence to the recommendations in FAA AC 43.13-1B Chapter 11, "Aircraft Electrical Systems," and Chapter 12, "Aircraft Avionics Systems," as well as AC 43.13-2A Chapter 1, "Structural Data," Chapter 2, "Radio Installation," and Chapter 3, "Antenna Installation," is required.
 - Antennas shall be polarized as required by the avionics system, and have a forward/reflected VSWR ratio of 2.5 to 1 or better.
 - Avionics equipment will not be mounted under seats designed for deformation during energy attenuation. In all instances, the designated areas for collapse shall be protected.
 - Personal Protective Equipment (PPE)

The following items will be furnished by the **CONTRACTOR**, worn by the pilot, and inspected for condition at the time of the initial condition/suitability inspection:

Aviator's flight helmet, consisting of a one-piece hard shell made of polycarbonate, Kevlar, carbon fiber, or fiberglass, must cover the top, sides (including the temple area and to below the ears), and the rear of the head. The helmet shall be equipped with a chinstrap and shall be appropriately adjusted for proper fit. The helmet must conform to a national certifying agency standard, such as DOT, Snell, SFI, or an appropriate military standard, or appropriate equivalent standard, and be compatible with required avionics. "Shorty" (David Clark style) helmets are not approved. Helmets such as those specified in Type Certificate A19SW note (13) are acceptable for use.

Pilots shall wear long-sleeved shirt and trousers (or long-sleeved flight suit) made of fire-resistant polyamide or aramid material or equal. Pilots shall wear boots made of all-leather uppers that come above the ankles and leather or polyamide or aramid gloves. The shirt, trousers, boots, and gloves shall overlap to prevent exposure to flash burns.

Pilot shall possess a first aid/survival kit suitable for individual use located in the cockpit. It is desirable that this kit be contained in the flight suit pockets or worn in a vest or pouch. If the kit is secured in the cockpit, it shall be in a conspicuously marked and accessible location.

Personnel involved in the handling of potentially hazardous materials shall wear protective equipment appropriate for the specific task (i.e., gloves, helmets, goggles, shields, boots, etc.).

Before beginning work under this contract, the **CONTRACTOR** shall furnish the **STATE** with properly executed certificates, which shall clearly evidence all airplane requirements, required in this contract.

24. The **CONTRACTOR** agrees to utilize, during the continuance of this contract, a Fuel/Support Service Vehicle meeting the following requirements:

- Fuel Servicing Vehicle: General
 - As stated in the contract terms and conditions of this document, the vendor shall comply with all applicable Federal, State, and local laws. Vendor fuel servicing vehicles must meet all requirements of 49 CFR applicable to the type of fuel being transported. NOTE: 49 CFR Part 171.1(c) pertains to persons under contract to the Federal Government.
 - An approved fuel servicing vehicle shall be provided with each aircraft. The fuel servicing vehicle shall be inspected annually and shall be stationed at the base of operation unless dispatched by the **STATE**.
 - **No State of South Dakota personnel shall be involved with refueling of SEAT aircraft.**

- Hot refueling will be permitted according ISOG requirements.
Simultaneous reloading of fire suppressant concentrates or retardant and refueling is prohibited.
- The fuel servicing vehicle shall be capable of transporting fuel over mountain roads. Trailers shall have an effective wheel-braking system. The power for the trailer braking system shall be controlled from the towing vehicle.
- The fuel servicing vehicle tank capacity shall provide for a minimum of 6 hours of flight time. The fuel servicing vehicle manufacturer's gross vehicle weight (GVW) with full fuel tanks and accessories shall not be exceeded. The fuel and support servicing vehicles shall be capable of carrying the contractor crew's overnight gear, and other items to support a lengthy assignment.
- Fuel servicing vehicles shall be properly maintained, clean, and reliable. Fuel tanks, plumbing, filters, and other required equipment shall be free of rust, scale, dirt, and other contaminants. All leaks shall be repaired immediately.
- All tanks will be securely fastened to the vehicle frame and shall have a sump or sediment settling area.
- Filter and pump sizes shall be compatible with the aircraft being serviced. A 10-gallon-per-minute flow rate delivered by the filter and pumped at the nozzle is the minimum size acceptable.
- Gasoline engine driven pumps shall have an ignition system designed to prevent arching and an approved spark arrestor muffler. All gasoline-powered refueling pumps shall have a metal shield between the pump and engine.
- Fuel Servicing Vehicle: Equipment

Each aircraft fuel servicing tank vehicle shall have two listed fire extinguishers, each having a rating of at least 20-B:C, with one extinguisher mounted on each side of the vehicle. Extinguisher(s) shall comply with *NFPA Manual 10: Standards for Portable Fire Extinguishers*.

Tanks erected for above ground storage, and tanks mounted on vehicles shall be designed to allow contaminants to be removed from the sump or sediment settling area.

Only hoses compatible with the aviation fuel being serviced will be used. Hoses shall be kept in good repair.

The fuel nozzle shall include a 100 mesh or finer screen, a dust protective device, and a bonding cable with clip or plug. Nozzle hold-open devices are not permitted.

An accurate fuel metering device for registering quantities in U.S. gallons of fuel pumped shall be provided. The meter shall be positioned in full view of the fuel handler while fueling the aircraft.

Fuel servicing vehicles shall have adequate bonding cables and shall be utilized in accordance with *NFPA Manual 407*.

Fuel servicing vehicles shall carry sufficient petroleum product absorbent pad or materials to absorb or contain a 5-gallon petroleum spill. The Contractor is responsible for proper disposal of all products used in the cleanup of a spill in accordance with the EPA (40 CFR Parts 261 and 262).

First aid kit containing the following items:

Each kit must be in a dust-proof and moisture-proof container.

The kit must be readily accessible.

Item Quantity

Adhesive bandage strips, (3" long) 8

Antiseptic or alcohol wipes (pkts) 10

Bandage compresses, 4" 2

Triangular bandage, 40" (sling) 2

Roller bandage, 4"x 5 yds (gauze) 2

Adhesive tape, 1"x 5 yds (std roll) 1

Bandage scissors 1

Body Fluids Barrier kit: 1

2 - pair latex gloves

1 - face shield

1 - mouth-to-mouth barrier

1 - protective gown

2 - antiseptic towelettes

1 - biohazard disposable bag

NOTE: Splints are recommended if space permits

▪ Fuel Servicing Vehicle: Filtering System

The fuel filtration system shall be designed to withstand fuel system pressures and flow rates.

The filter manufacturer's operating, installation and service manual shall be carried in the fuel servicing vehicle and followed.

Filtration must meet one of the following qualifications:

Institute of Petroleum (IP), API 1581, or Mil-F-8901E. Some examples of IP qualified elements are Velcon CDF 210K, CDF 220K, ACO 51201K, ACO 21201K, ACO 40501SPK, and ACO 40901SPK, or Facet Spin-On cartridges FGS-O-405 and FGS-O409, and Facet FG-210-2, FG215-2, FG-220-2, FG-O-512-2, FG-O-609-2 and FG-O-614-2.

The filter vessel shall be placarded indicating the filter change date.

Differential pressure gauges shall be installed on refueling systems if required by the filter manufacturer or in systems with operating pressures of 25 psi and above.

The filter assembly shall be mounted to allow room for draining and pressure flushing of the unit. If installed, water sight gauge balls shall be visible.

Three-Stage (filter, water separator, monitor) Systems (API/IP 1581 or Mil-F-8901E qualified). Fueling systems shall utilize a three-stage system such as a Facet part number 050970 M2 (900442-FG-220) using Facet cartridges for a 20-gallon-per-minute pump, or equal. A Facet part number 050971-M2 (900443-FG-210) using Facet cartridges for a 10-gallon-per-minute pump, or equal. All three-stage filter elements should be from the same manufacturer. An acceptable third stage (monitor) unit is Velcon CDF 220K for 20-gpm flow or Velcon CDF 210K for 10-gpm systems.

Single-Stage System or Three-In-One Filter Canister Systems (API/IP 1583 qualified) shall utilize a single element system such as a Velcon or Facet filter canister with Aquacon or Facet FuelGard (FG-O-xxx) cartridge of a size compatible with the pump's flow rate. Examples: Velcon VF-61 canister with an ACO-51201K cartridge for 50- to 60-gpm flow rate or ACO-40501SPK for 10- to 15-gpm flow rate. Facet FuelGard canister with a Facet FG-O-512-2 or Facet Spin-On cartridge FGS-O-405 and FGS-O-409 for 10- to 15-gpm flow rate. Facet 21 series canister with a FG-O-609-2 cartridge for 40-gpm flow rate. Facet 22 series canister with a FG-O-612 for 50-gpm flow rate.

At least one spare filter, seals, and any other spare components of the fuel servicing vehicle filtering system shall be stored in a clean, dry area in the fuel servicing or support vehicle.

- Fuel Servicing Vehicle: Markings

Each fuel servicing vehicle shall have NO SMOKING signs with 3-inch minimum letters visible from both sides and rear of vehicle. Each fuel servicing vehicle shall also be conspicuously and legibly marked to indicate the nature of the fuel. The markings shall be on each side and the rear in letters at least 3 inches high on a background of a sharply contrasting color such as Avgas by grade or jet fuel by type. EXAMPLES: Jet-A white on black background or Avgas 100 white on green background.

- Support/Service Vehicle Requirements

The support vehicle may be combined with the fuel service vehicle. The weight of water need not be considered as part of the GVW. Each vehicle must be equipped with a listed fire extinguisher of at least 20-B:C capacity meeting *NFPA Manual 10* standards and a first aid kit meeting above First Aid Kit requirements.

The support vehicle shall have a minimum water capacity equal to two times the approved hopper capacity. The volume of the mix tank may be included in

calculating the minimum water capacity. The vehicle must be capable of localized transport of this capacity of water.

The vehicle shall have hose couplers to accept water from **STATE** equipment as follows:

One 1½-inch female National Hose Thread and one 2 ½ inch female National Hose Thread adapters to 2 inch and 3 inch male and female Kamlock couplers.

The support vehicle minimum batch mixing capability in a single vessel shall be at least equal to the volume of the aircraft hopper.

The support vehicle batch mixing equipment must be capable of loading and mixing both dry powder and liquid concentrate retardant products.

Retardant products shall be introduced into the aircraft through the loading system apparatus, and not poured directly into the hopper.

Material from the servicing vehicle or other source shall be loaded through a standard dry-break coupler or shut-off valve.

Loading system hoses and fittings shall be capable of containing residual material without leaking.

The material loading system shall be capable of pumping at the rate of at least 100 gallons per minute.

The loading port shall be located behind the wing and clearly marked.

25. The **CONTRACTOR** agrees to utilize, during the continuance of this contract, personnel meeting the following requirements:

- The pilot shall hold a commercial pilot certificate and instrument rating for airplanes.
- The pilot shall hold a current and valid airman's certificate (front and back).
- Pilot shall hold at least a current Class II medical certificate issued under provisions of 14 CFR Part 67.
- Pilot shall have category and class ratings in the aircraft to be flown, or type rating if required.
- Pilot shall meet the requirements of 14 CFR Part 61.56(a) and (c), or (d) and "recent flight experience pilot-in-command" of 14 CFR Part 61.57(a).
- Pilot shall possess proof of qualifications to meet 14 CFR Part 137.53 for congested areas.
- Pilot shall have completed biennial flight review.

- Part 137 Certificate (Business)
- Pilot shall have completed Introduction to Fire Behavior (S-190).
- Pilot shall have accumulated the minimum pilot-in-command time as follows:
 - 1,500 hours...Total in all aircraft
 - 1,200 hours...PIC in airplanes
 - 100 hours...Airplanes during the preceding 12 months
 - 25 hours...PIC in make and model to be flown
 - 10 hours...PIC in the last 60 days
 - 200 hours...PIC in low-level agricultural dispensing operations
 - 200 hours...PIC over typical terrain (hazardous/mountainous)
 - 5 hours...PIC in make and model to be flown each calendar year including: 1) five takeoffs and landings; 2) at the discretion of the pilot inspector, dropping two full loads of fire suppressant material under the inspector's observation. The drops shall be in an aircraft supplied by the **CONTRACTOR** at no expense to the **STATE**.
- The **CONTRACTOR** shall furnish fuel/servicing, support/service vehicle driver(s) for each day the aircraft is required to be available. Each driver may be requested to demonstrate an acceptable knowledge of correct fueling, safety, and suppressant loading/mixing procedures for equipment installed on the fuel/servicing, support/service vehicle.

Before beginning work under this contract, the **CONTRACTOR** shall furnish the **STATE** with properly executed certificates, which shall clearly evidence all personnel requirements, required in this contract.

OPERATIONAL SPECIFICATIONS

26. Contract Costs

- During the ordered period of use, the Contractor shall be in compliance with all contract requirements and available and capable of providing service up to 14 hours each day as scheduled by the State of South Dakota. Personnel shall be available a minimum of nine (9) hours each day or as scheduled by the State of South Dakota. Pre- and post-flight activities shall be accomplished within the 14 hour duty day. Routine maintenance shall be performed before or after the scheduled 14 hour period or as permitted elsewhere in the contract.
- Extended standby will follow the National On Call Contract rates, published in the 2008 National On Call Single Engine Air Tankers Contract effective May 1, 2010. Extended standby is intended to provide the Contractor compensation for employee

time when ordered services are provided in excess of the first 9 hours of service. Ordered standby shall not exceed individual crew members' daily duty limitations. Extended standby is not intended to compensate the Contractor on a one-to-one basis for all hours necessary to service and maintain the aircraft.

- The **STATE** will furnish water, foam concentrates and retardants.
- Hourly rates for aircraft are dry rates. **Economic Price Adjustment for fuel will follow chapter C14 of the National On-Call Contract.**
-
- Daily availability rates for aircraft include the fuel/service, support/service vehicle. Availability rates will be reduced prorata for each hour or portion thereof the aircraft is unavailable.
- A three day standby rate is guaranteed when ordered for services under this contract.
- Availability will not be measured or recorded for payment on the crew's mandatory days off. If the **STATE** requests and the **CONTRACTOR** provides a relief crew, availability will be paid.
- **STATE** supplied foam and/or fire retardant will be documented on Daily Activity Log attached to the invoice.
- If the **CONTRACTOR** flies a mission while on standby, the **STATE** will reimburse the **CONTRACTOR** for the daily standby rate and the hourly rate for actual flight time.
- The **CONTRACTOR** will log and bill flight time in 1/10-hour increments. Times will be rounded to the next higher 1/10-hour increment.
- The **STATE** will reimburse the **CONTRACTOR** for all landing fees and airport use costs (tie-downs) the **CONTRACTOR** is required to pay at designated and/or alternate base.
- No payment will be made for flights when a load of water or retardant mixture is accidentally or carelessly dropped on non-target areas. Additionally, the cost to the **STATE** of the lost load of retardant may be charged to the **CONTRACTOR** and deducted from payments due.
- Flight time will be paid for by the **STATE** and retardant will not be charged to the **CONTRACTOR** if a load is dropped to enhance aircraft performance in a bona fide emergency or to meet landing requirements which endanger the safety of the aircraft.
- **CONTRACTOR's** per diem and mileage reimbursements for fuel/service trucks will be paid by the **STATE** according to the terms and rates found in the 2008 National On Call Single Engine Air Tankers Contract, effective May 1, 2008..

27. Stand-by

- Stand-by is defined as follows: Aircraft is stationed at a dispatch point for quick, rapid deployment.
- When on stand-by, **CONTRACTOR** shall be required to be able to respond as follows:

Low or Medium Fire Danger: Within 30 minutes of aircraft respectively.

High, Very High and Extreme Fire Danger: Pilot must be located with the aircraft. The aircraft must be pre-flighted and ready to fly with payload in 15 minutes or less.

When on stand-by, pilot is responsible for obtaining daily fire danger for the location where pre-positioned.

28. Ground Support

- **STATE** will provide the following ground support to complete the operation.

A qualified SEAT Manager, or a SEAT Manager Trainee who is in direct contact with a qualified SEAT Manager, will be assigned to each SEAT base in operation. If a qualified SEAT Manager, or SEAT Manager Trainee who is in direct contact with a qualified SEAT Manager, is not available operations will cease. In addition to directing work of the SEAT, the manager has the following contract administration duties and authority:

Conduct pre-use inspection.

Secure compliance with all contract provisions and specifications.

Initiate and sign correspondence and other contract administration documents over the title "SEAT Manager".

Record and agree to availability and flight times.

Approve authorized breaks.

Suspend Operations at their discretion (example: safety or request of **STATE**.)

Complete Contractor evaluation at end of assignment.

If the pre-use inspection reveals equipment problems the manager should call the State of South Dakota Fire Aviation Officer or the Wildland Fire Suppression Division Director, to report the discrepancies found.

29. Orders for National On-Call Services

- Orders for service under this contract will be placed with the **CONTRACTOR** who is determined to be most advantageous to the **STATE**. Factors that will be considered are aircraft capability, cost, location and availability of the **CONTRACTOR**.
- All pilots will receive a mission briefing from an agency representative for each base of operations prior to dispensing operations.
- The **STATE does not guarantee** the placement of orders for service under this contract, and the **CONTRACTOR** is not obligated to accept any orders. However, once the **CONTRACTOR** accepts an order, the **CONTRACTOR** is obligated to perform in accordance with the terms and conditions stated herein.

30. Flight Crewmembers Duty and Flight Limitations

- Assigned duty of any kind shall not exceed 14 hours in any 24-hour period. Duty includes flight time, ground duty of any kind, and standby or alert status. Local travel up to a maximum of 30 minutes each way between the work site and place of lodging

will not be considered duty time. Flight crewmembers will be subject to the following duty hour limitations:

A maximum of 14 consecutive duty hours during any assigned duty period.

Pilots shall be given 2 calendar days of rest (off duty) within any 14 consecutive calendar days.

The pilot shall be given a minimum of 10 consecutive hours of rest (off duty), prior to any assigned duty period.

31. Flight limitations

- All flight time, regardless of how or where performed, except personal pleasure flying, will be reported by each flight crewmember and used to administer flight time and duty time limitations. Flight time to and from a duty station as a flight crewmember (commuting) will be reported and counted toward limitations if it is flown on a duty day. Flight time includes but is not limited to: military flight time; charter; flight instruction; 14 CFR Part 61.56 flight review; flight examinations by FAA designees; any flight time for which a flight crewmember is compensated; or any other flight time of a commercial nature whether compensated or not. Flight crewmembers will be limited to the following flight hour limitations, which shall fall within their duty hour limitations:

A maximum of 8 hours flight time during any assigned duty period.

A maximum of 42 hours flight time during any consecutive 6-day period. When a pilot acquires 36 or more flight hours in a consecutive 6-day period, the pilot will be given the following one calendar day off duty for rest, after which a new 6-day cycle will begin.

32. Relief Crew Availability

- A relief crew is not required. On mandatory days off the **CONTRACTOR** may provide a relief crew when requested by the **STATE**. When relief crews are requested by the **STATE**, the state will reimburse the contractor for relief crew relocation expenses, according to the rates published in the 2008 National On Call Single Engine Air Tankers Contract, effective May 1, 2008. Contractor is required to provide for the transportation of the relief personnel, unless otherwise directed by the **STATE**. Prior to the exchange, the Contractor is responsible for advising the State of South Dakota WFS Aviation Officer or SEAT Manager for expenditure approval. Relief crew members may need to arrive at the work site in advance of the scheduled duty period to assure compliance with rest periods.

33. Flight Operations

- Regardless of any status as a public aircraft operation, the **CONTRACTOR** shall operate in accordance with applicable FAA regulations (including those portions applicable to civil aircraft) and each certification required unless otherwise authorized by the **STATE**.
- Aircraft may be requested to operate from areas, other than improved airports, such as temporarily closed roadways of varying composition and construction.

- Low-level flight is required, therefore, adherence to the minimum safe altitudes specified in 14 CFR Part 91.119 is required unless engaged in actual dispensing operations where the requirements of 14 CFR Part 137.49 will apply.
- The aircraft's strobe lights will be illuminated during all flight operations. The aircraft's conspicuity lighting shall be illuminated while in fire environments.
- Fire suppressant materials shall be dropped, as accurately as possible, on the target areas of the fire from low level. Minimum drop height is 40 feet above ground cover. The pilot shall, when possible, ascertain from fire officials (Incident Commander, Airtanker Coordinator, or Air Attack Supervisor) the precise drop location.
- The pilot shall remain at the controls of the aircraft when the engine is operating.

34. Flight plans

- Pilots shall file and operate on an FAA, ICAO, or a DOI bureau flight plan. **CONTRACTOR** flight plans are **not** acceptable. Flight plans shall be filed prior to take off.

35. Flight Following

- Pilots are responsible for flight following with the FAA, ICAO, and/or in accordance with the DOI bureau's approved flight following procedures. Check-in intervals shall not exceed one-hour intervals under normal circumstances.
- Day/night use. Single-engine aircraft shall be limited to flight during daylight hours and under VFR conditions only. Daylight hours are defined as from 30 minutes before official sunrise to 30 minutes after official sunset, or, in Alaska, during extended twilight hours when terrain features can be readily distinguished from a distance of at least one mile.
- An Automated Flight Following System (AFF) that complies with the AFF provisions in paragraph 22, page 9, of this Agreement is required to conduct flight following.

○ Mission Acceptance

- Only the pilot is responsible for accepting or rejecting fire missions as presented to the pilot from a fire dispatch center.
- The flights will be under the control of the **STATE** in all aspects; provided however, that the pilot shall not be required to take any action which is not, in the opinion of the pilot, in accordance with safe operating practices

36. Security of Aircraft and Equipment

- Using other means of securing or disabling an aircraft is acceptable provided it achieves a level of security equal to or greater than the following example methods.
 - Keyed magneto
 - Keyed starter switch
 - Keyed master power switch
 - Hidden battery cutoff switches
 - Hidden start relay switches
 - Throttle/power lever lock
 - Mixture/fuel lever lock
 - Locking fuel cutoff

- Locking tiedown cable
- Locking control surface “gust-lock”
- Propeller lock
- Propeller chain lock
- Propeller cable lock
- Locking wheel lock or chock
- Locking “club” type devices for control yoke
- Unacceptable locking devices and methods are:
 - Locking aircraft doors
 - Fenced or gated parking area

37. Payload

- The pilot is responsible for determining aircraft payload based on density altitude and aircraft performance.

39. Pay rates are:

Active Standby Rates including compensation for ground support:

At \$2,600.00 per day.

Flight Time: at \$2,500.00 per hour.

Per Diem: same as USDOJ rates used.

Service Truck Mileage: \$0.00 per mile

Extended Av. Pilot: \$45.00 per hour

Extended Av. Driver: \$30.00 per hour

Relief Crew: same as USDOJ rates used

PERSONAL INFORMATION

Please list phone numbers and pager numbers of yourself and anyone else who might be flying for you. Please prioritize these numbers in the order you would like them contacted.

Name Matt Lutz Home Phone 406-538-5016

Cellular Phone 406-350-0498 Work Phone 406-622-5682

Pager _____ Fax 406-622-5460

Name Andy Taylor Home Phone 406-622-3350

Cellular Phone 406-788-0268 Work Phone 406-622-5682

Pager _____ Fax 406-622-5682

Name _____ Home Phone _____

Cellular Phone _____ Work Phone _____

Pager _____ Fax _____

IN CASE OF EMERGENCY, WHOM SHOULD WE CONTACT?

Name Laura Wood Relationship Secretary of New Frontier

Home Phone 406-739-4344 Work Phone 406-622-5682

Cellular Phone 406-788-5365 Pager _____

AIRCRAFT INFORMATION

Aircraft Make and Model AT-802A

FAA No. N627LA

Hopper Gallons 800

Capacity Pounds 8155

Location of **CONTRACTOR'S** base of operation Fort Benton, Montana

Daily Availability Rate \$2600.00

Flight Rate \$2500.00/Flight hr

Aircraft Make and Model _____

FAA No. _____

Hopper Gallons _____

Capacity Pounds _____

Location of **CONTRACTOR'S** base of operation _____

Daily Availability Rate _____

Flight Rate _____

Aircraft Make and Model _____

FAA No. _____

Hopper Gallons _____

Capacity Pounds _____

Location of **CONTRACTOR'S** base of operation _____

Daily Availability Rate _____

Flight Rate _____

In Witness Whereof, the parties signify their agreement effective the date above first written by the signatures affixed below.

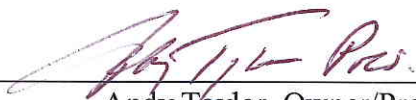
STATE

BY: 
Jon Farris
Acting Secretary, Department of Agriculture

DATE: 8-22-10



CONTRACTOR

BY: 
Andy Taylor, Owner/President
New Frontier Aviation, Inc.

DATE: 8/11/10



SINGLE ENGINE AIRTANKER DAILY ACTIVITY LOG

Date: _____
Contractor: _____ **Pilot:** _____ **Rate:** _____
Contractor: _____ **Pilot:** _____ **Rate:** _____
Base of Operation: _____ (FAA Code)

Aircraft:

Fire Name	Fire Number	Start Time	Stop Time	Total Time	Aircraft N#	Retardant (gal.)	Foam (gal.)	Water (gal.)	Fuel (gal.)

Aircraft Totals:

Contractor	Flight Time	Fuel	Retardant	Foam	Water



SINGLE ENGINE AIRTANKER DAILY ACTIVITY LOG

Equipment:

Fuel/Support Truck License Number	Start Time	Stop Time	Total Time	Miles	Driver

Ground Support Personnel:

Name	Start Time	Stop Time	Total Time	Vehicle License	Vehicle Miles

Signatures:

SEAT Base Manager _____ Pilot: _____